

## WHAT IS CLAIMED IS:

1. A process for producing an ethylcellulose having an ethoxyl content  
5 of from 40 to 55 percent and a viscosity of from 1 to 100 mPa's, measured as a 5 weight percent solution in toluene and ethanol at a volume ratio of 80:20 at 25°C, which process comprises the step of depolymerizing an ethylcellulose having an ethoxyl content of from 40 to 55 percent and a viscosity of from 4 to 400 mPa's in the presence of gaseous hydrogen halide to achieve a reduction in viscosity of the ethylcellulose of at least 10 percent.  
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2. The process of Claim 1 wherein an ethylcellulose having an ethoxyl content of from 40 to 55 percent and a viscosity of from 1 to 10 mPa's is produced.
3. The process of Claim 1 or 2 wherein the depolymerization is  
15 conducted in the presence of gaseous hydrogen chloride.
4. The process of any one of Claims 1 to 3 wherein the depolymerization step is conducted in the presence of from 0.5 to 5.0 percent of water, based on the weight of the ethyl cellulose.  
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5. The process of any one of Claims 1 to 4 wherein the depolymerization step is conducted in the presence of from 0.1 to 0.5 weight percent of hydrogen chloride, based on the total weight of ethylcellulose to be depolymerized.
6. The process of any one of Claims 1 to 5 wherein depolymerized ethylcellulose is packaged without a neutralization step after depolymerization.  
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7. The process of any one of Claims 1 to 6 wherein an ethylcellulose having a viscosity of from 4 to 100 mPa's is depolymerized to an ethylcellulose having a  
30 viscosity of from 1 to 2.5 mPa's.

8. A process for producing an ethylcellulose having an ethoxyl content of from 40 to 55 percent and a viscosity of from 1 to 100 mPa's, measured as a 5 weight percent solution in toluene and ethanol at a volume ratio of 80:20 at 25°C, which process comprises the steps of

5           a) etherifying alkalized cellulose with ethyl chloride in the presence of an organic solvent to produce an ethylcellulose having an ethoxyl content of from 40 to 55 percent and a viscosity of from 4 to 400 mPa's and

10          b) depolymerizing the produced ethylcellulose in the presence of gaseous hydrogen halide to achieve a reduction in viscosity of the ethylcellulose of at least 10 percent.

9. The process of Claim 6 wherein the depolymerization step b) is carried out as claimed in any one of claims 2 to 8.

15          10. An ethylcellulose having an ethoxyl content of from 40 to 55 percent and a viscosity of from 1 to 2.5 mPa's, measured as a 5 weight percent solution in toluene and ethanol at a volume ratio of 80 : 20 at 25 °C.

20          11. The ethylcellulose of Claim 7 having a viscosity of from 1 to 2.3 mPa's.

12. The ethylcellulose of Claim 7 or Claim 8 having an ethoxyl content of from 45 to 52 percent.

25          13. Use of the ethylcellulose of any one of Claims 10 to 12 for preparing a tablet coating or a film for controlled drug release.